

Patent claims

1. A thermoplastic molding composition comprising
 - a) from 20 to 99% by weight of a thermoplastic polymer other
5 than a polyoxymethylene homo- or copolymer,
 - b) from 0.1 to 80% by weight of an additive selected from the
group consisting of fillers, reinforcing materials, impact
modifiers, and their mixtures, and
 - c) from 0.00001 to 1.0% by weight of a catalyst which catalyzes
10 the formation of covalent bonds between the thermoplastic
polymer and the surface of the additive.
2. A long-fiber-reinforced thermoplastic molding composition as
claimed in claim 1 comprising
 - d) from 20 to 90% by weight of a thermoplastic polymer other
15 than a polyoxymethylene homo- or copolymer;
 - e) from 10 to 80% by weight of a reinforcing fiber,
 - f) from 0.00001 to 0.5% by weight of at least one catalyst which
catalyzes a chemical reaction between the thermoplastic
20 matrix polymer and the surface of the reinforcing fiber.
3. The thermoplastic molding composition as claimed in claim 1,
wherein the amount of component a) is from 20 to 99% by weight,
that of component b) is from 0.1 to 80% by weight, and that of
25 component c) is from 0.00001 to 0.5% by weight.
4. The thermoplastic molding composition as claimed in claim 1,
wherein use is made of a catalyst or a mixture of catalysts which
catalyzes transesterification, transamidation, or transurethanization
30 reactions, or catalyzes the formation of ester groups, amide groups,
and urethane groups.
5. The thermoplastic molding composition as claimed in claim 1,
wherein the catalyst is a Lewis acid and is preferably not a Brønsted
35 acid.
6. The thermoplastic molding composition as claimed in claim 1,
wherein the catalyst is selected from the group consisting of

phosphonium salt, phosphanes, ammonium salts, sulfonium salts, titanates, titanyle compounds, zirconates, and their mixtures.

- 5 7. The thermoplastic molding composition as claimed in claim 1, wherein mineral fillers, reinforcing fibers, impact modifiers, or their mixtures are used as additive.
- 10 8. The thermoplastic molding composition as claimed in claim 1, wherein the thermoplastic polymer is selected from the group consisting of polyolefin, in particular polypropylene, polyethylene, or modified polyolefin; polyacrylate, polymethacrylate, polymers obtainable via polymerization of esters and/or amides of acrylic or methacrylic acid, and also their copolymers, polyamide, polyester, polycarbonate, polyether, polythioether, polyphenylene oxide, 15 polyarylene sulfides, or their mixtures.
- 20 9. The thermoplastic molding composition as claimed in claim 1, wherein the catalyst is selected from the group consisting of ethyltriphenylphosphonium bromide, tetraphenylphosphonium bromide, tetrabutylphosphonium bromide, stearyltributylphosphonium bromide, triphenylphosphane, n-butyl titanate, or their mixtures.
- 25 10. The thermoplastic molding composition as claimed in claim 2, wherein the long-fiber-reinforced thermoplastic molding composition is a glass fiber bundle which has been sheathed by one or more layers of the thermoplastic matrix polymer, so that the fibers have been impregnated with the thermoplastic matrix polymer.
- 30 11. The thermoplastic molding composition as claimed in claim 10, wherein the glass fiber bundle has been wetted by the thermoplastic polymer or by a blend of thermoplastic polymers, and the impregnated glass fiber bundle has been sheathed by another component, and the impregnated glass fiber bundle and the other 35 component have been bonded to one another at the surface.
12. A molded article obtainable via shaping of a thermoplastic molding composition as claimed in claim 1.